QUALCAST

# 25cc

# Petrol Hedge Trimmer

## Original Operating Instructions

**POWERFUL 25CC 2 STROKE ENGINE.**
Ideal for medium to large gardens.

**LONG DUAL ACTION 60CM OVERALL BLADE LENGTH.**
Large cutting area for efficiency.

**28CM TOOTH SPACING.**
For greater performance and precise finish.

**EASY PULL STARTING SYSTEM.**
Quick & easy to start.

**ROTATING REAR HANDLE.**
For greater control & comfort.

## AFTER SALES SUPPORT

**UK / IRELAND HELPLINE NO** 0151 6491500
**REP. IRELAND HELPLINE NO** 1890 946244
**WEB SUPPORT** www.einhell-uk.co.uk

**MODEL: QG-PH2652**
**MANUFACTURERS ARTICLE NO: 34.038.28**

QUALCAST 2 FREE YEAR LIMITED WARRANTY

# Contents


03. Safety Guide

05. Product Diagrams

10. Technical Data

12. Assembly

16. Declaration of Conformity

17. Product Guarantee


Read and follow the operating instructions and safety information before using for the first time.

**Safety information:**

1. This machine can cause serious injuries. Read the instructions for use carefully to discover how to use it correctly:
- preparation
- maintenance
- starting and stopping the machine

Make yourself familiar with all the adjusters on the machine and how to use it properly.

2. Children must never be allowed to use the hedge trimmer.

3. Take care near overhead power cables.

4. Do not use the hedge trimmer when people are nearby, particularly children.

5. Wear suitable clothing. Do not wear loose clothing or jewelry as it may get caught in moving parts. We recommend that you wear strong gloves, non-slip shoes and safety goggles.

6. Stop the engine or pull the mains plug before the following:
- Cleaning or removing a blockage
- Carrying out inspections, maintenance or other work on the machine
- Adjusting the working position of the cutters
- If the hedge trimmer is left unattended

7. If the angles of the cutter and/or the length of the shaft can be adjusted on the hedge trimmer, do not hold the blades when adjusting the working position of the cutter. Always make sure that the cutter is in the correct working position before you start the engine or connect the plug to the mains supply.

8. Always stand in a safe position whilst using the machine, particularly if you are using steps or a ladder.

9. Handle fuel with care. It is highly inflammable and the fumes are explosive. Be sure to comply with the following points:
- Only use containers that are specially designed for this purpose
- Never remove the fuel tank cap or refuel if the engine is running or hot. Prior to refueling the equipment, allow the engine and the exhaust parts to cool down.
- Do not smoke.
- Only refuel out in the open.
- Never store the hedge trimmer or the fuel tank in a room with a naked flame, for example a lit water heater.
- If petrol has overflowed, do not attempt to start the engine. Instead remove the equipment from the affected area first.
- Always empty the tank out in the open.
- Do not inhale fuel vapors. They are toxic.

10. Do not carry out any repair work on the machine unless you have been trained to do so.

11. Do not use the machine if it has a damaged or excessively worn cutter.

12. To reduce the risk of fire ensure that the engine and silencer are clear of deposits, leaves and lubricants.

13. The machine may exceed 85 db (A) at the workplace. The operator will require noise protection measures and ear defenders if this is the case.

14. Always make sure that all the handles and safety equipment are fitted whilst you are using the machine. Never attempt to use an incomplete machine or one that has been modified illegally.

15. Always use both hands if the hedge trimmer is fitted with more than one handle.

16. Always place the cover over the cutter when transporting or storing the machine.

17. Important. This hedge trimmer is suitable for cutting hedges, bushes and shrubs. Any use which is not expressly permitted in manual may result in damage to the hedge trimmer and place the user in serious danger.

18. If it becomes necessary to stop the machine immediately, set the ON/OFF switch to "Stop" or "0"

19. Make yourself familiar with your surroundings and watch for possible dangers that you may not be able to hear due to the noise generated by the machine.

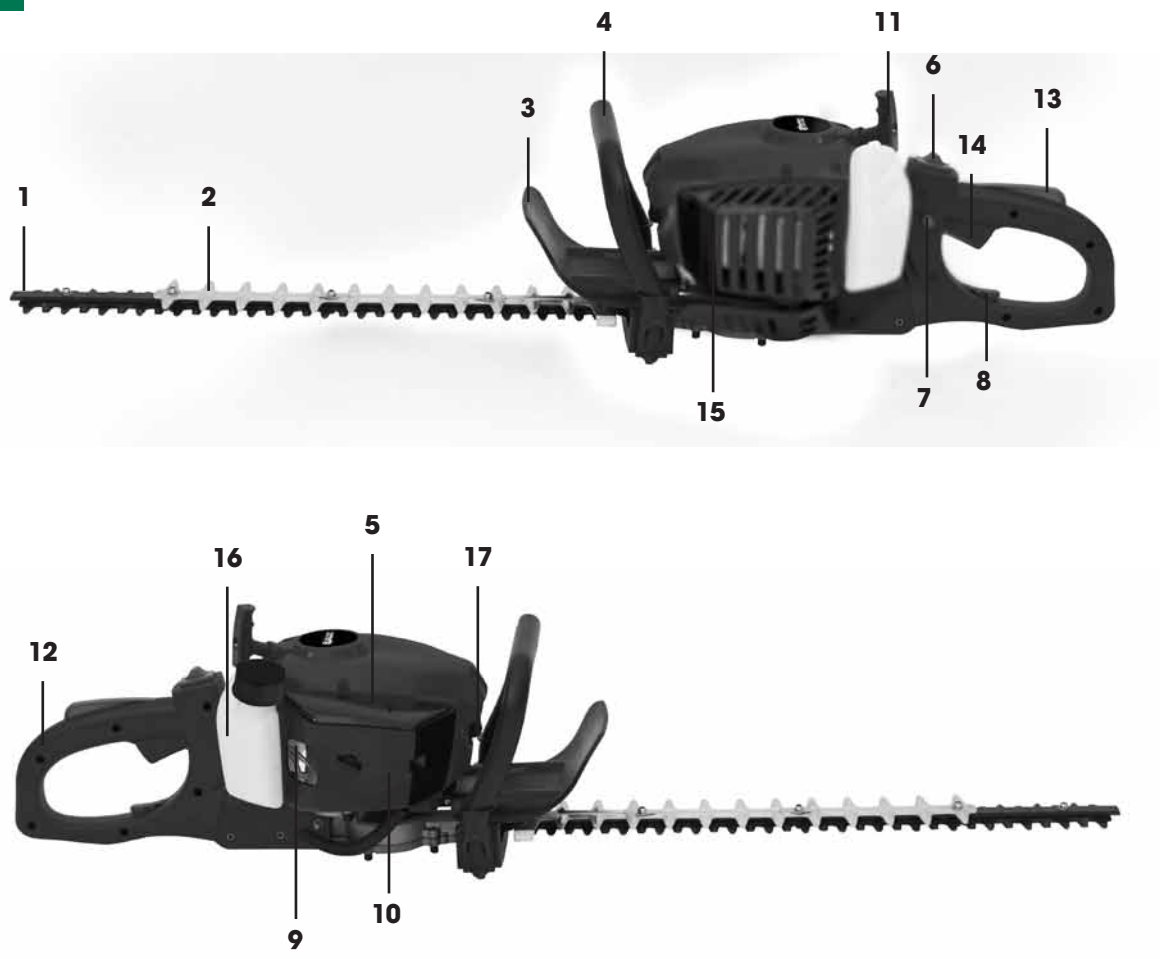
20. If the cutters touch a foreign body or should the operational noises increase or the hedge trimmer vibrate severely, switch off the engine and wait for the cutters to stop. Pull off the spark plug boot from the spark plug and carry out the following measures:
- Check for damage.
- Check for loose parts and secure all loose parts.
- Replace the damaged parts with equivalent spare parts or have the damaged parts repaired.

21. Switch off the engine prior to:
- Cleaning or removing a blockage.
- Carrying out inspections, maintenance or other work on the hedge trimmer.
- Adjusting the working position of the cutters.
- If the hedge trimmer is left unattended

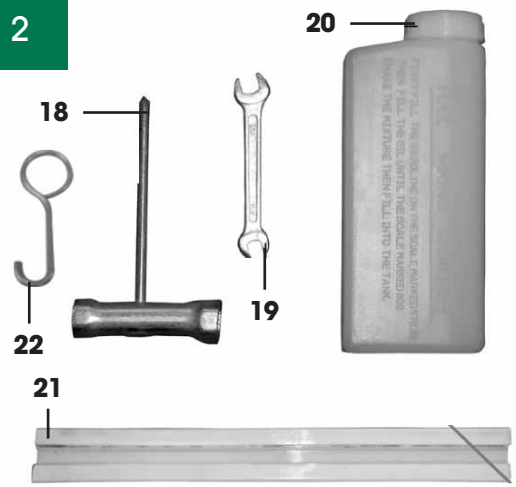
## Additional safety instructions

1. Store the machine in a safe place. Carefully open the fuel tank cap beforehand to release any pressure that may have built up in the tank.
2. Start the machine at least 3 m away from the refueling site to avoid the possible risk of fire.
3. Keep the handles dry, clean and free from the fuel mixture, oil and grease.
4. Do not use any fuel other than that recommended in the instructions for use. Always follow the instructions in the section entitled "Fuel and oil". Never use pure petrol, always use the specified petrol and oil mixture. Otherwise the machine would suffer permanent damage and the manufacturer's warranty would be voided.
5. Do not use the machine without the silencer and/or screen for the silencer.
6. Never touch the silencer after you have used the machine. Leave the machine to cool down for a while before carrying our maintenance or adjustment work.
7. Do not use the hedge trimmer near inflammable liquids or gases. This could result in an explosion and/or fire.
8. Switch the machine off before you place it on the ground.
9. Check all screws and seals at regular intervals to ensure that they are tight and tighten them if necessary. Never use the machine if it has not been properly adjusted or has not been fully or safely assembled.
10. Always clear items such as bottles, stones, etc. away from where you are working. Catapulted items may cause serious injuries to the user or people nearby and may also damage the machine. If you strike an item by accident, switch off the machine immediately and check it. Never work with a damaged or broken machine.
11. Do not modify, remove or add any things to any components of this machine. This could cause injuries or damage the machine and void the manufacturer's warranty.
12. Do not use the machine when you are tired or for lengthy periods without breaks.
13. Do not use the machine if you have consumed alcohol, drugs or strong medication.
14. Always hold the machine with both hands so that your fingers and thumbs are hooked around the handles.
15. Only use the machine outdoors. Exhaust fumes are toxic.

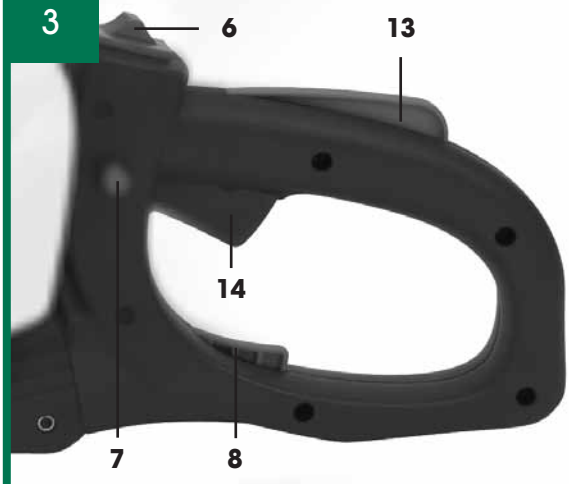
1



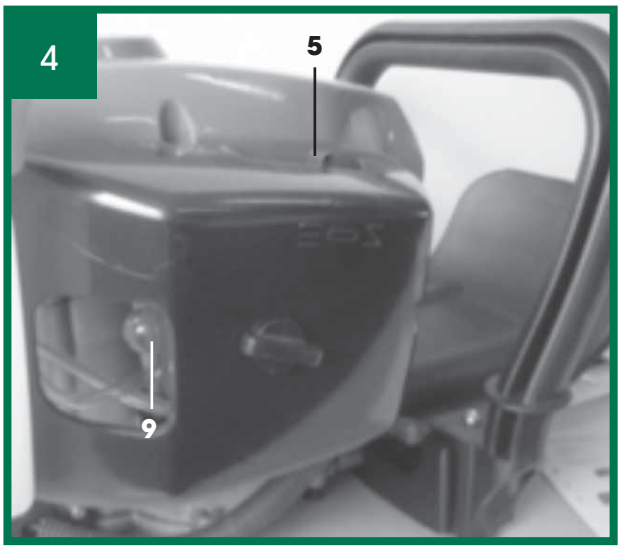

2



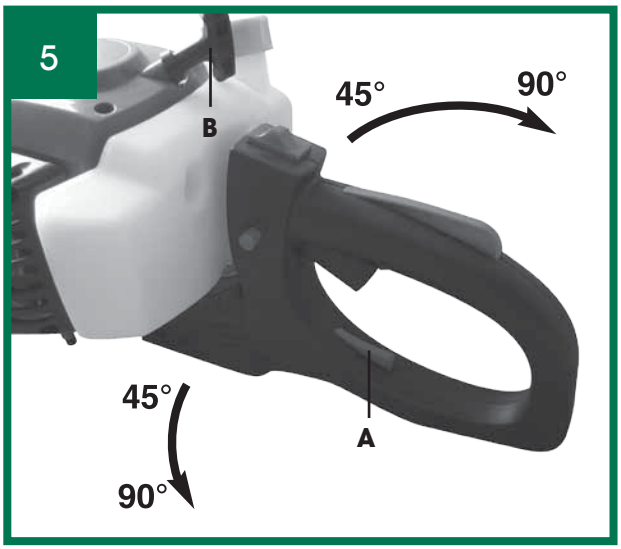

3



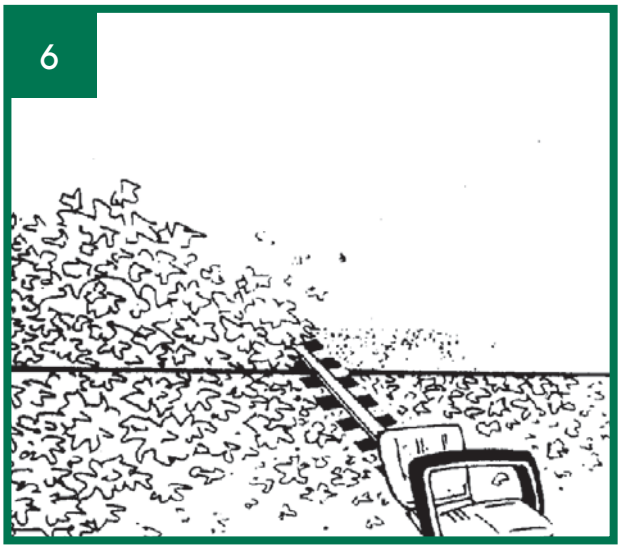
4



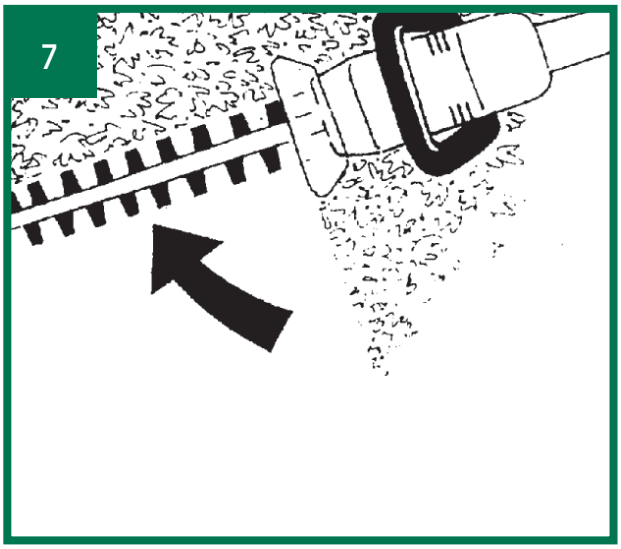

5



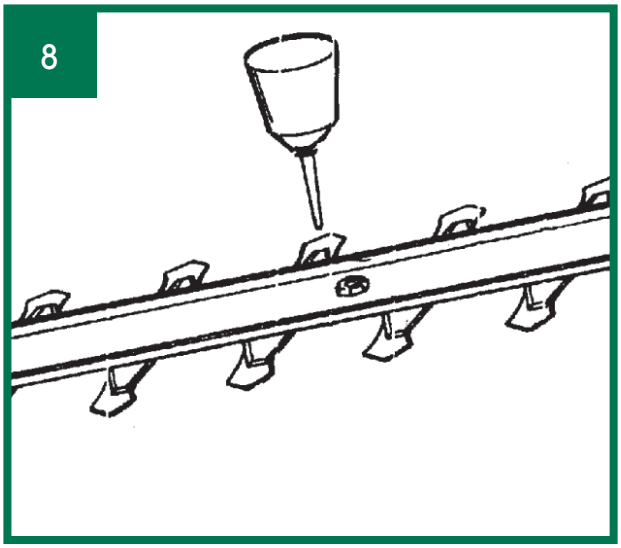

6



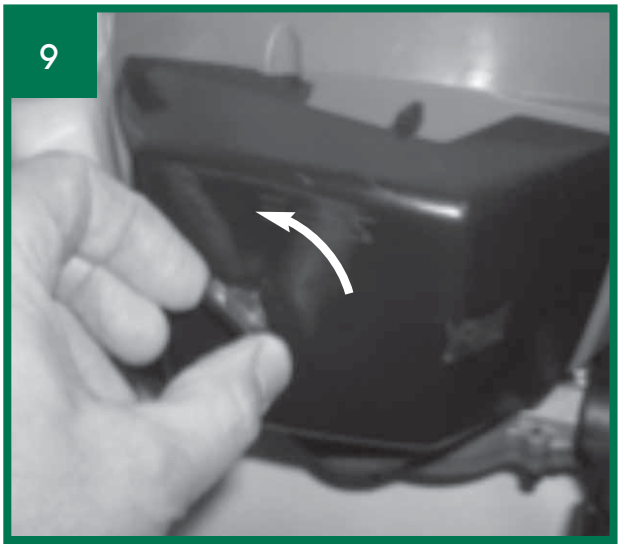
7



8

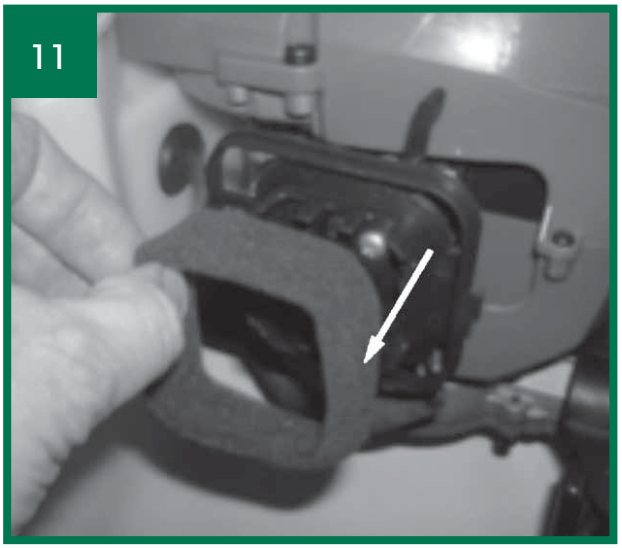


9

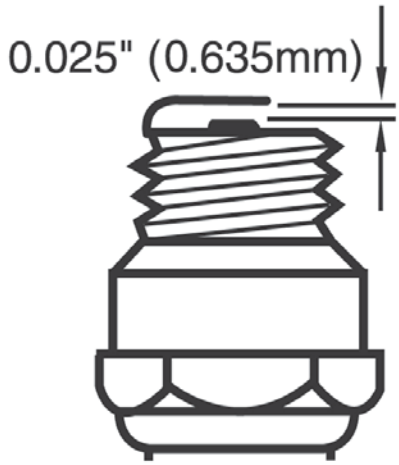


10

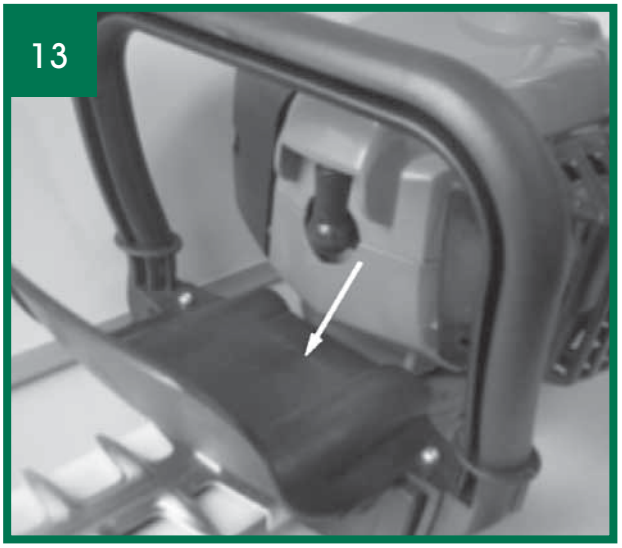
11



12



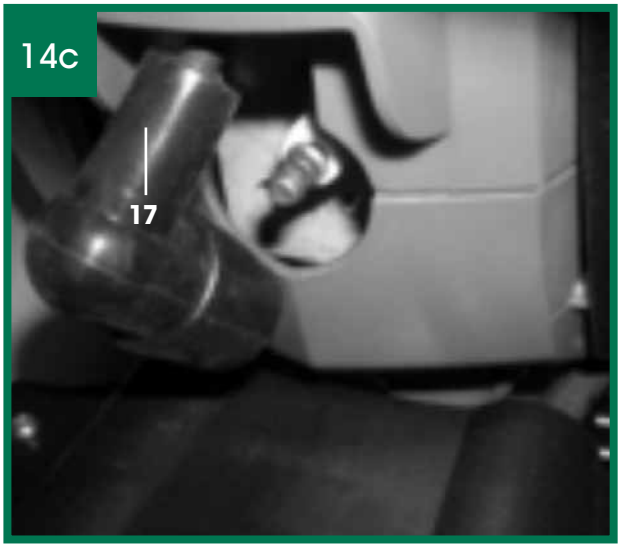

13



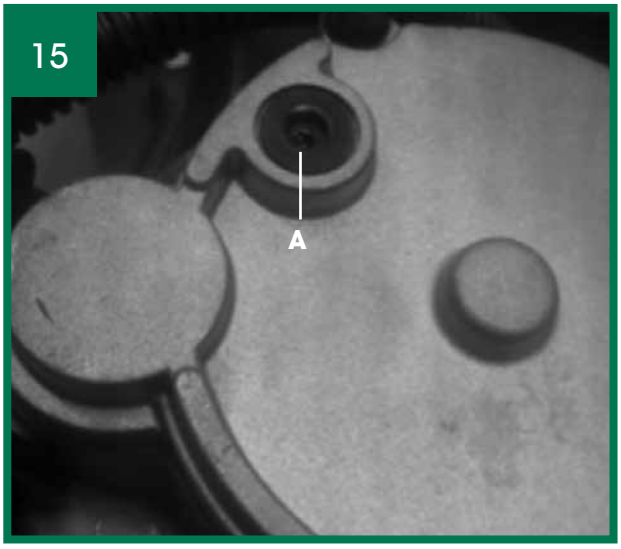
14a

14b

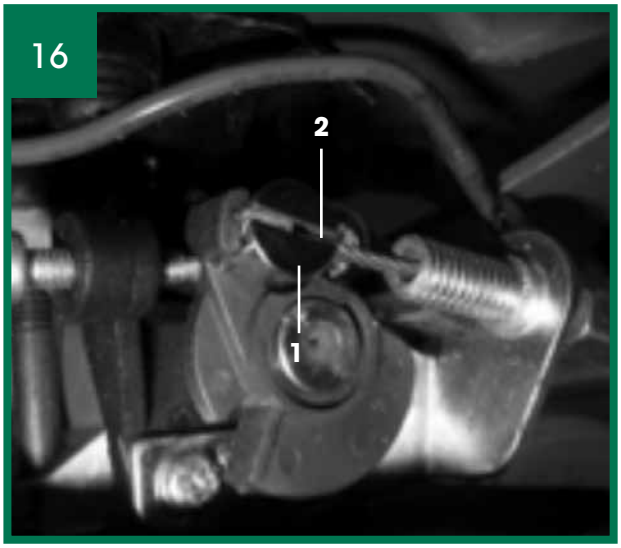
14c



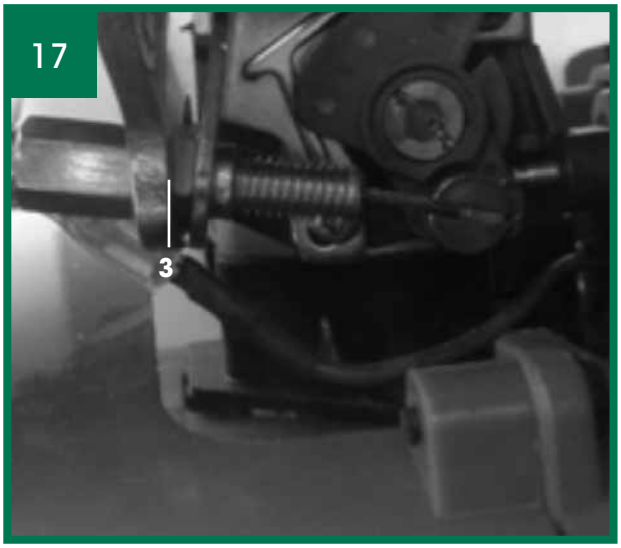

15



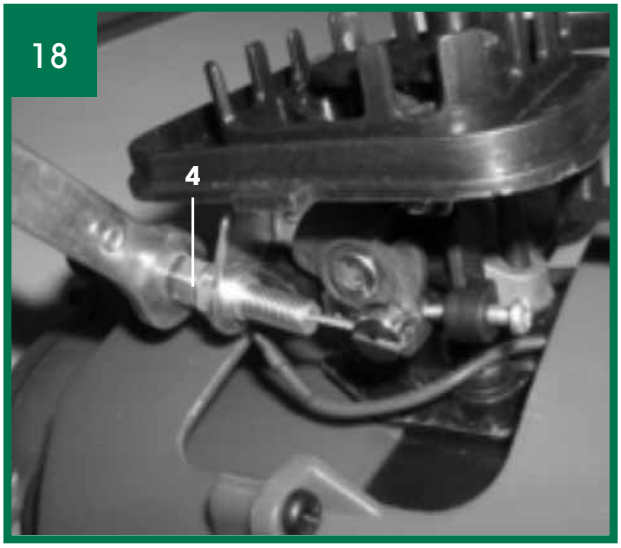

16



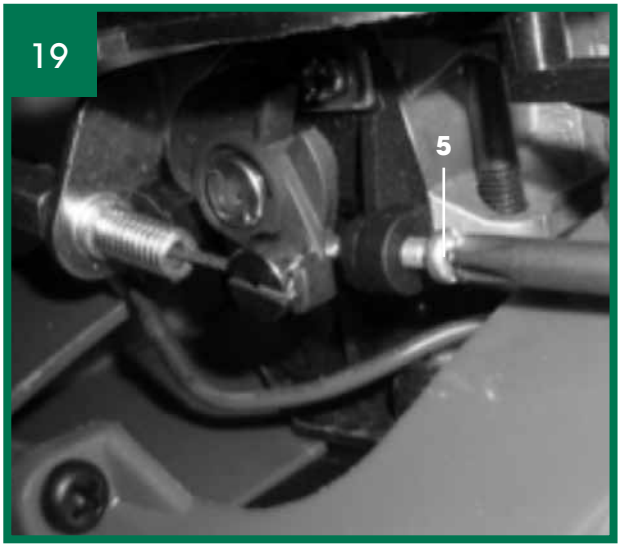

17

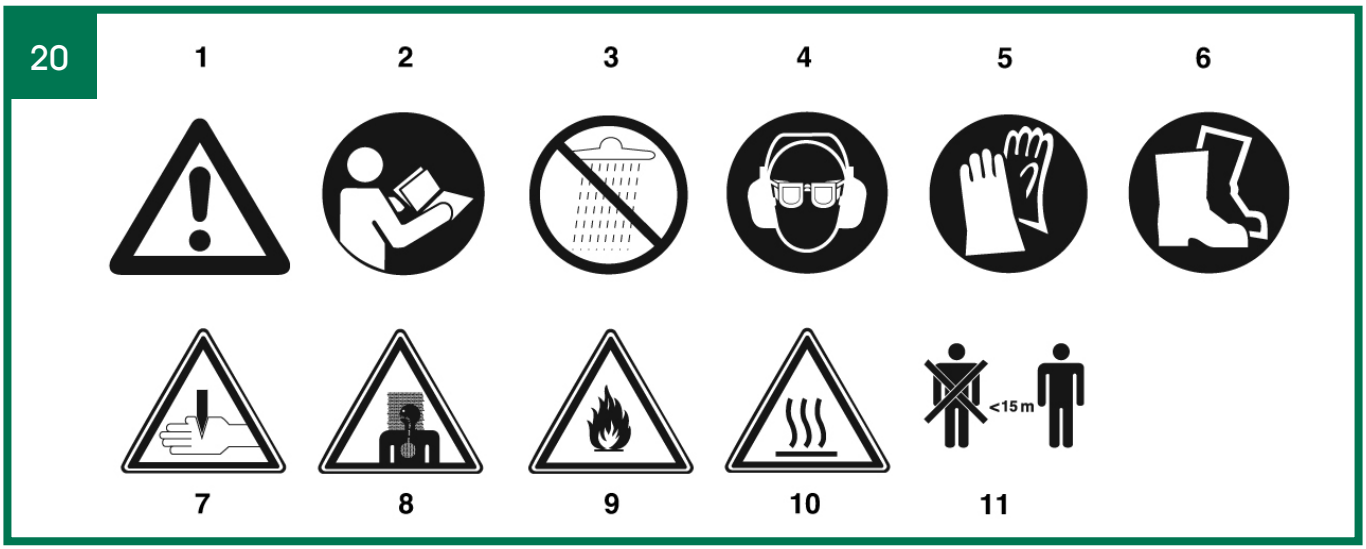



18




19






## 1. Safety regulations

The corresponding safety information can be found in the enclosed booklet.

**CAUTION!**

**Read all safety regulations and instructions.** Any errors made in following the safety regulations and instructions may result in an electric shock, fire and/or serious injury.

**Keep all safety regulations and instructions in a safe place for future use.**

### Explanation of the warning signs on the equipment (see Fig. 20)

1. Warning!
2. Read the directions for use before operating the equipment.
3. Do not expose the hedge trimmer to rain or wet conditions.
4. Wear eye protection and ear plugs.
5. Wear safety gloves.
6. Wear sturdy, non-slip footwear.
7. Caution: Sharp blades! Always keep hands and feet away from the blades.
8. Operate and start the equipment only outdoors in well ventilated areas to reduce the danger of injury from toxic gases.
9. Explosive material.
10. Very hot surface. Do not touch the hot exhaust silencer, gearbox or cylinder. You may burn yourself. These parts have become very hot during operation and remain very hot over a long period even after the equipment has been switched off.
11. Maintain a distance of at least 15 m from other persons.

## 2. Layout and items supplied (Fig. 1-2)

1. Cutting blade
2. Cutting blade safety cover
3. Safety plate
4. Front handle
5. Choke lever
6. ON/OFF switch
7. Locking knob for throttle lever
8. Locking knob for rotary handle
9. Fuel pump (primer)
10. Air filter cover
11. Starter handle
12. Rear handle
13. Throttle lever "release"
14. Throttle lever
15. Silencer cover
16. Tank for fuel mixture
17. Spark plug boot
18. Spark plug wrench
19. 8 mm / 10 mm open-ended spanner
20. Combined oil/petrol mixing bottle
21. Cutter rail cover
22. Spark Plug boot hook

## 3. Proper use

**Important. This hedge trimmer is suitable for cutting hedges, bushes and shrubs.**

**IMPORTANT!**
**Please note that our equipment has not been designed for use in commercial, trade or industrial applications. Our warranty will be voided if the equipment is used in commercial, trade or industrial businesses or for equivalent purposes.**

**IMPORTANT!**
**The machine is to be used only for its prescribed purpose. Any other use is deemed to be a case of misuse. The user / operator and not the manufacturer will be liable for any damage or injuries of any kind caused as a result of this.**

## 4. Technical data

Engine type:
2-stroke engine, air-cooled, chrome cylinder

| | |
|---|---|
| Engine output (max.): | 0.8kW / 1.1hp |
| Displacement: | 25.4ccm |
| Idle speed of engine: | 3200 $min^{-1}$ |
| Max. engine speed: | 8500 $min^{-1}$ |
| Weight (with empty tank): | 5.8 kg |
| Cutter rail length (for blade exposure from the gear box): | 60 cm |
| Cutting overall length: | 65cm |
| Tooth spacing: | 28 mm |
| Cutting capacity (max.): | 19 mm |
| Tank capacity: | 0.5 l |
| Spark plug: | Champion RCJ6Y |
| Max. cutting speed: | 2000 ± 100 cuts/min |
| Vibration (front handle) $a_{hv}$: | 9.5 $m/s^2$ |
| Kuncertainty: | 1,5 $m/s^2$ |
| Vibration (rear handle) $a_{hv}$: | 9.5 $m/s^2$ |
| Kuncertainty: | 3 $m/s^2$ |
| Sound pressure level $L_{pA}$: | 96 dB |
| Kuncertainty: | 3 dB |
| Sound power level $L_{WA}$: | 112 dB |
| Kuncertainty: | 3 dB |

Sound and vibration were measured in accordance with DIN EN 10517.

## 5. Before starting the machine

### 5.1 Installation

The hedge trimmer is supplied fully assembled. No assembly work is required.

To make it easier to control, the machine is fitted with a rotary handle that can be adjusted as required into positions at angles of -90°/-45°/0°/+45°/+90°. To do this, pull the lever (Fig. 5/Item B) backwards, turn the rotary handle into the required position and then allow the lever to lock at the front again. The various adjustable

positions facilitate working above head height or in other places with different access.
**Please note:** The rotary handle may only be adjusted when the engine is switched off.

### 5.2 Fuel and oil

**Recommended fuels**
Use only a mixture of normal unleaded petrol and special 2-stroke engine oil. Mix the fuel mixture as indicated on the fuel mixing table.

**Please note:** Do not use a fuel mixture which has been kept for longer than 90 days.

**Please note:** Do not use 2-stroke oil with a recommended mixing ratio of 100:1. If inadequate lubrication causes engine damage, the manufacturer's engine warranty will be voided.
**Please note:** Only use containers designed and approved for the purpose to transport and store fuel.

Pour the correct quantities of petrol and 2-stroke oil into the mixing bottle (see scale printed on the bottle). Then shake the bottle well.

### 5.3 Fuel mixture table

Mixing procedure: 40 parts petrol to 1 part oil

| Petrol | 2-Stroke oil |
|---|---|
| 1 Litres | 25 ml |
| 5 Litres | 125 ml |

## 6. Operation

Please note that the statutory regulations governing noise abatement may differ from town to town.

### 6.1 Starting the engine from cold (Fig. 3-5)

Fill the tank with the required amount of oil/petrol mix.
1. Set the machine down on a hard, level surface.
2. Set the choke lever (Fig. 4/Item 5) to "".
3. Press the fuel pump (primer) (Fig. 4/Item 9) 10 times.
4. Move the ON/OFF switch (Fig. 3/Item 6) to "I"
5. Secure the throttle lever. To do this, press the throttle lever lock (Fig. 3/Item 13) and then press the throttle lever (Fig. 3/Item 14) and lock the throttle lever by pressing the locking knob (Fig. 3/Item 7) at the same time.
6. Hold the machine by the front handle in your left hand and using your right hand, pull the starter cable (Fig. 5/Item A) up to the first resistance point (approx. 10 cm). Then tug sharply on the starter cable 4 times. The machine should start.
Please note: Never allow the starter cable to snap back. This may damage the machine.
7. If the engine has started, set the choke lever immediately to " " and allow the machine to warm up for approx. 10 seconds. Then release the throttle lever by simply actuating it (the engine then returns to running in idle mode).
8. If the engine does not start up, repeat steps 6-7 above.

**Please note:** If the engine does not start up even after several attempts, read the section "Engine Troubleshooting".

**Please note:** Always pull the starter cable out in a straight line. If it is pulled out at an angle, then friction will occur on the eyelet. As a result of this friction, the cable will become frayed and will wear away faster.

### 6.2 Starting the engine when warm (if the machine has not been switched off for more than 15 – 20 minutes

1. Set the machine down on a hard, level surface.
2. Switch the ON/OFF switch to "I".
3. Secure the throttle lever (in the same way as described in "Starting the engine when cold").
4. Hold the machine by the front handle in your left hand and using your right hand, pull the starter cable up to the first resistance point (approx. 10 cm). Then tug sharply on the starter cable. The machine should start after 1-2 tugs. If the machine does not start after 6 pulls, repeat steps 1 – 7 of the procedure for starting the engine from cold.

### 6.3 Switching off the engine

Emergency Stop procedure:
If it becomes necessary to stop the machine immediately, set the ON/OFF switch to "Stop" or "0"

Normal procedure:
Let go of the throttle lever and wait until the engine has changed to idling speed. Then set the ON/OFF switch to "Stop" or "0".

### 6.4 Practical tips

Never allow the machine to run at low speed for starting or for cutting.

**Cutting for dense growth:** The most effective method is to use wide, sweeping movements, guiding the cutting edge of the blade straight through the branches. A slight incline of the blade downwards towards the movement will produce best cutting results.

It is recommended to tie a guide line of string or the like along the hedge so that you cut the hedge to a level height. The branches above it will be cut off. (Fig.6)

**Cutting the side of a hedge:** Cut the sides of the hedge with curve-shaped movements from the bottom up. (Fig. 7)

**Please note:** As a result of its design, if you work with the machine on its side for a lengthy period and the tank is not completely filled, the motor may stall.

## 7. Cleaning, maintenance, storage and ordering of spare parts

### 7.1 Cleaning

• Keep all safety devices, air vents and the motor housing free of dirt and dust as far as possible Wipe the equipment with a clean cloth or blow it with compressed air at low pressure.

• We recommend that you clean the device immediately each time you have finished using it.

• Clean the equipment regularly with a moist cloth and some soft soap. Do not use cleaning agents or solvents; these could attack the plastic parts of the equipment. Ensure that no water can seep into the device.

### 7.2 Maintenance

Always switch off the head trimmer and remove the spark plug boot before carrying out any maintenance work.

1. The cutter blades are high quality, made of tempered steel and in normal use there is no need to sharpen the blades. If you accidentally strike a wire, stone, glass or other hard object, this may cause a notch in the blade. There is no need to remove the notch as long as it does not adversely affect the movement of the cutting edges. If it does adversely affect this movement, switch off the machine and use a fine file or a fine grinding stone to remove the notch. Ensure that the blade's cutting edge is always well oiled (see Fig. 8).

2. If you drop the hedge trimmer, check whether it has suffered any damage. If it is damaged Contact Helpline: 0151 649 1500

3. Only clean the machine after it has been switched off. Use only mild soap and a damp cloth to clean it. Never allow fluid to get into the machine. Do not use caustic cleaning products.

#### 7.2.1 Maintenance of the air filter (Fig. 9-11)

Soiled air filters reduce the engine output by supply too little air to the carburettor.
Regular checks are therefore essential. The air filter should be checked after every 25 hours of use and cleaned if necessary. If the air contains a lot of dust, the air filter should be checked more frequently.
1. Remove the air filter cover (Fig. 9-10)
2. Remove the filter element (Fig. 11)
3. Clean the filter element by tapping it or blowing it.
4. Assemble in reverse order.

**Please note:** Never clean the air filter with petrol or inflammable solvents. Clean the air filter with compressed air or by tapping it.

#### 7.2.2 Maintenance of the spark plug (Fig.12-14C)

Spark plug gap = 0.025 inch (0.635 mm). Tighten the spark plug with a torque of 12-15 Nm.

Check the spark plug for dirt and grime after 10 hours of operation and if necessary clean it with a

copper wire brush. Thereafter service the spark plug after every 50 hours of operation.
'The spark plug is located at the front of the engine by the front handle (Fig. 13).

1. Clip the Hook (Fig. 14A & 14B / Item 22), under the arm of the spark plug boot (Fig. 14C / Item 17) and remove it, by pulling away from the engine (Fig. 13).
2. Remove the spark plug (Fig. 14C) with the supplied spark plug wrench.
3. Assemble in reverse order.'

### 7.2.3 Maintenance of the gearbox (Fig. 15)

The gearbox must be lubricated every year before the start of the season by removing the screw cover from the base of the gearbox, and adding the grease via the hole. (Fig. 15/Item A). If you use the trimmer frequently, grease the gearbox more often.

### 7.2.4 Carburettor settings

**Important.** Settings on the carburettor may only be made by authorized customer service personnel. The air filter cover must be removed before any work on the carburettor, as shown in Figures 9 – 10.

**Setting the throttle cable:**
If the maximum speed of the machine falls over time and you have ruled our all the other causes listed in section 9 Troubleshooting, it may be necessary to adjust the throttle cable.

First of all check whether the carburettor opens fully when the throttle handle is pressed fully. This is the case if the carburettor slide (Fig. 16/Item 1) rests against the stop (Fig. 16/Item 2) when the throttle is fully open. Figure 16 shows the correct setting. If the carburettor slide does not touch the stop, it must be adjusted.

The following work is required to adjust the throttle cable:
- Undo the lock nut (Fig. 17/Item 3) a few turns.
- Undo the adjusting screw (Fig. 18/Item 4) until the carburettor slide rests against the stop when the throttle is fully open, as shown in Figure 16.
- Retighten the lock nut.

**Setting the idling speed:**
**Important.** Set the idling speed when the machine is warm.

If the engine stalls when the throttle is not pressed and you have ruled out all the other causes listed in section 9 Troubleshooting, the idling speed must be adjusted. To do this turn the idling speed screw (Fig. 19/Item 5) clockwise until the machine runs smoothly at idling speed.

If the idling speed is so fast that the cutting blades do not reach a standstill, the idling speed must be reduced by turning the idling speed screw (Fig. 19/Item 5) counterclockwise until the cutting blades stop.

### 7.3 Storage

**Please note:** If you fail to follow these instructions correctly, deposits may form on the interior of the carburettor which may result in the engine being more difficult to start or the machine suffering permanent damage.
1. Carry out all the maintenance work.
2. Drain the fuel out of the tank (use a conventional plastic petrol pump from a DIY store for this purpose).
3. When the fuel has been drained, start the engine.
4. Allow the engine to run at idling speed until it stops. This will clean the remainder of the fuel out of the carburettor.
5. Leave the machine to cool (approx. 5 minutes).
6. Remove the spark plug (see point 7.2.2).
7. Place a teaspoon full of 2-stroke engine oil into the combustion chamber. Pull the starter cable several times carefully to wet the internal components with the oil. Fit the spark plug again.
8. Clean the exterior housing of the machine.
9. Store the machine in a cold, dry place where it is out of the reach of ignition sources and inflammable substances.
10. Always place the cover over the cutter when transporting or storing the equipment.

Fertilizers and other chemical garden products often contain substances that accelerate the rate of corrosion of metals. Do not store the machine on or near fertilizers or other chemicals.

**Restarting**

1. Remove the spark plug.
2. Pull the starter cable several times to clean the oil residue out of the combustion chamber.
3. Clean the spark plug contacts or fit a new spark plug.
4. Fill the tank. See the section entitled Fuel and oil.
5. Complete steps 1-7 described under the point entitled "Starting the engine from cold".

**7.4 Ordering replacement parts**

Please quote the following data when ordering replacement parts:

- Type of machine (QG-PH2652)
- Article number of the machine (34.038.28)
- Identification number of the machine (11010)
- Replacement part number of the part required

For our latest prices and information please go to www.einhell-uk.co.uk

## 8. Disposal and recycling

The unit is supplied in packaging to prevent its being damaged in transit. This packaging is raw material and can therefore be reused or can be returned to the raw material system.

The unit and its accessories are made of various types of material, such as metal and plastic. Defective components must be disposed of as special waste. Ask your dealer or your local council.

## 9. Troubleshooting

| FAULT | POSSIBLE CAUSES | REMEDY |
|---|---|---|
| The machine does not start | - Correct starting procedure not followed<br>- Sooted or damp spark plug<br>- Incorrect carburettor setting | - Follow the instructions for starting<br>- Clean the spark plug or replace it with a new one<br>- Contact Helpline: 0151 649 1500 |
| The machine starts but does not develop its full output | - Incorrect choke lever setting<br>- Soiled air filter<br>- Incorrect carburettor setting | - Set choke lever to <br>- Clean the air filter<br>- Contact Helpline: 0151 649 1500 |
| The engine does not run smoothly | - Incorrect electrode gap on the spark plug<br>- Incorrect carburettor setting | - Clean the spark plug and adjust the electrode gap or fit a new spark plug<br>- Contact Helpline: 0151 649 1500 |
| Engine smokes excessively | - Incorrect fuel mix<br>- Incorrect carburettor setting | - Use the correct fuel mix (see fuel mixing table)<br>- Contact Helpline: 0151 649 1500 |

Please adhere to the following maintenance periods in order to ensure a failure-free operation.

Important! Fill in engine oil and fuel before starting up the engine for the first time.

| 2-Stroke | Before each use | After an operating period of 20 hours | After an operating period of 50 hours | After an operating period of 100 hours | After an operating period of 300 hours |
|---|---|---|---|---|---|
| Check the air filter | X | | | | Change the filter element if necessary |
| Clean the air filter | | | X | | |
| Clean the petrol filter | | | | X | |
| Visual inspection of the unit | X | | | | |
| Clean the spark plug | | | Distance: 0.6mm, Replace if necessary | | |
| Check and readjust the carburettor throttle valve | | | | | X* |
| Clean the cylinder head | | | | | X* |
| Set the valve clearance | | | | | X* |

Important: The positions marked with “X*” should only be carried out by an authorized repair agent.